

Claims 39-45 and 47-50 are rejected under 35 USC 112, second paragraph, for indefiniteness. The Examiner states that the feature referred to by "it" is unclear. Applicant notes that by common grammatical usage the word "it" refers to the immediately preceding noun, which in this instance is "the computing device." However, to eliminate any ambiguity, claim 39 has been amended to change "it" to "the computing device." Applicant requests that this rejection be withdrawn.

Claims 1, 3, 9, 19-20, 23, 27, 39, and 41 stand rejected under 35 USC 103(a) for obviousness over Mizutani (US Pat. No. 6,603,744) in view of Genske (US Publ. No. 2002/0065872), Luu (US Pat. No. 6,945,165), and Hancock (US Pat. No. 6,202,223). The remaining claims are rejected over Mizutani, Genske, Luu, and Hancock in combination with other references. With regard to claim 1, the Examiner states that Mizutani discloses each of the claimed features, except an autorun operation, a private memory area that is not viewable or accessible by the user, or providing wireless Internet access for which the Examiner cites Genske, Luu and Hanks, respectively.

The following remarks are directed to independent claim 1, but are similarly applicable to independent claims 19 and 39. Amended claim 1 has been amended to emphasize the many distinctions over the cited references and recites as follows:

A portable wireless communication device that is connectable to and disconnectable from an external port of a computing device by a user to provide the computing device with wireless Internet access, the portable wireless communication device not being an integrated part of the computing device, comprising:

a structural device interface that is user-connectable to and user-disconnectable from a structural, non-wireless external port of the computing device;

a wireless communication component for enabling wireless radio frequency communication;

a memory circuit that includes a private memory area not accessible or viewable by a user, the private memory area storing protected computer software, the protected computer software being installable and executable at the computing device to enable the radio frequency communication at the computing device;

whereby the portable wireless communication device is operable to install and execute the protected computer software at the computing device automatically upon connecting the portable wireless communication device to the computing device, and to provide the computing device with wireless Internet access through the wireless communication component of the portable wireless communication device.

Claim 1 recites and is directed to a portable wireless communication device that is connectable to and disconnectable from a computing device by a user to provide the computing device with wireless Internet access, the portable wireless communication device not being an integrated part of the computing device. The connectability and disconnectability of the portable wireless communication device by a user is described in the application at paragraph [0009], for example, in reference to the communication device being plugged into, or unplugged from, a USB interface or port of a PC (personal computer):

A communication device of present invention includes a structural, external interface (e.g., a USB interface) for connecting to a computing device ((Application, paragraph [0006].)

For example, a user of the mobile computing device can simply plug the communication device (e.g., size of an adapter or dongle) into a USB interface or port of the PC. The user can then instantly send a document or data over a wireless connection, through the communication device and to a printer connected to the PC, all directly from the mobile device. After the printing process has been completed, the communication device is unplugged from the PC and no data is retained by the PC. No printer driver installation is needed in the mobile device and the user can print to any printer that is connected to the PC. In addition, the printer need not be a wireless printer. (Application, paragraph [0009].)

wireless device 100-500 is connected externally to the computing device. (Application, paragraph [00080].)

Moreover, the “structural, non-wireless external port” recited in amended claim 1 is supported by the “USB interface or port” into which the communication device is plugged (paragraph [0009] above, for example, and paragraphs [0008] and [0033]). Likewise, the communication device being distinct from and not

integrated into the computing device is supported by the description of the communication device being plugged into and unplugged from the computing device (paragraph [0009] and paragraph [0080] above, for example) and by the illustrations of Figs. 1-5 and 10. Applicant submits that the cited art does not teach or suggest the claimed subject matter for the following reasons.

Mizutani describes a wireless USB as an improvement upon the conventional non-wireless USB for communicating with peripheral devices such as keyboards, mouse input devices, printers, etc. (Mizutani, Col 1, lines 26-30). The wireless USB of Mizutani is intended to prevent "damage to a connector on the host side [that] may be caused by inadvertent insertion and removal of a connector on the device side." (Mizutani, col 1, lines 36-40.) Mizutani describes implementing a wireless USB to replace a conventional USB port in a computer. Mizutani connects a wireless USB hub to a USB bus in a computer and connects a wireless port to the USB interface of a peripheral device. Wireless communication is then implemented between the wireless hub in the computer and the wireless port in the peripheral device. One or more wireless USB enabled computers can then wirelessly communicate with one or more wireless USB peripherals without the need for a user to plug and unplug the USB interface of the peripheral device to the USB port of the computer. Mizutani teaches that:

"a wireless USB hub connected to the USB bus in the computer side, and a wireless port connected to a USB interface of a peripheral device,..., are provided and wireless communication is performed between the two" (Mizutani, col. 2, lines 47-53.), to prevent damage to a connector on the host side caused by inadvertent insertion and removal of a connector on the device side."(Mizutani, col 1, lines 37-39).

Mizutani further teaches that the wireless USB hub is connected to the USB bus in a "bus topology" in a computer and the wireless port is implemented in the peripheral device and not implemented in the computer. To implement the wireless communication, the wireless bus in the computer and the wireless port

in the peripheral device each have a unique device identifier for detecting the state of the peripheral device by the wireless hub that is connected to the USB bus: "a wireless bus and a wireless port each have a device identifier (ID uniquely) assigned to them and in the USB-wireless conversion, a destination specified by the USB address or bus topology, is converted into a device identifier". (Mizutani, Col. 2, line 61-65). Mizutani teaches that the wireless USB port is implemented on the peripheral device side so that the wireless hub in the computer can detect wirelessly the connecting, disconnecting and wake up state of the peripheral device by communicating with the wireless port:

"The wireless hub periodically broadcasts a packet indicating the port states, and controls the operation of the wireless ports, while maintaining the frame synchronization in the wireless system. On the other hand, a wireless port for which there is a change in the device state, such as connect, disconnect, or remote wake up, transmits to the wireless hub notification of the state change as the response to this packet." (Mizutani, Col 3, 23-30).

Mizutani does not describe or suggest a portable wireless communication device that is connectable to and disconnectable from an external port of a computing device by a user to provide the computing device with wireless Internet access, the portable wireless communication device not being an integrated part of the computing device. Instead, Mizutani describes a wireless hub connected to a USB bus, and not to an external USB port of the computing device, to prevent damage to the USB connector caused by inadvertent insertion and removal of connector of the peripheral device. Additionally, Mizutani teaches that the wireless port is implemented in the peripheral device and not implemented in the wireless communication device that is connected to the external port of the computer as recited in independent claims. Furthermore, in Mizutani, the wireless hub detects wirelessly the state of the wireless port in the peripheral device such as connect, disconnect, wake up etc. using a unique identifier between the USB bus in the computer and the wireless port in the peripheral device.

Mizutani does not describe the USB hub as being “portable” as recited in the independent claims. Additionally, Mizutani does not describe or suggest that the USB hub is connectable to and disconnectable from an external port of a computing device by a user to provide the computing device with wireless Internet access. Instead, Mizutani describes that the USB hub is connected to a USB bus in a computer. The teaching of Mizutani would lead one skilled in the art to implement a wireless port in the peripheral device and not in the wireless USB hub or the wireless communication device as recited in the independent claims. This is so that the computer can detect wirelessly connection, disconnection, and wake up state of the peripheral device wirelessly and to prevent damage to the USB connector of the computer by inadvertent insertion and removal of the connector of the peripheral device by a user. Therefore, following the teaching of Mizutani would lead one skill in the art further away from a portable wireless communication device that is connectable to and disconnectable from an external port of a computing device by a user. Finally, Mizutani does not describe or suggest a device that is connectable to and disconnectable from a structural external port of a computing device by a user to provide the computing device with wireless Internet access.

Genske is directed to a particular method of injecting an application or driver from a client device, such as a digital camera, into a host computing device. (Genske, paragraphs [0011] and [0012].) Luu is directed to installing an application on a computer disk-drive (i.e., hard drive) from a specified segment of the computer disk-drive to avoid distributing software on portable media or by online connections. (Luu, col. 1, lines 31-35.) Hancock is directed to a system in which a server provides to a client over the Internet information based upon the geographic location of the client.

The cited references do not teach or suggest a portable wireless communication device that is not an integrated part of a computing device and is user-connectable to and user-disconnectable from the computing device to provide the computing device with wireless Internet access. As describe above, Mizutani provides no teaching or suggestion of a portable wireless

communication device that is user-connectable and user-disconnectable to provide the computing device with wireless Internet access through a wireless communication component of the portable wireless communication device.

The Examiner states that it would be obvious to combine Mizutani and Genske "to facilitate automatic installation of computer software on the computing device as taught by Genske in order to enable the radio frequency communication at the computing device as taught by Mizutani" based on a motivation to "improve Mizutani's teachings." Without conceding applicability of such a motivation to combine Mizutani and Genske, applicant notes that a combination of the two references would provide the wireless USB system of Mizutani that is directed to providing a wireless one-to-many coupling with peripheral devices with installation of operating software based on the content of the registry. The combination of Mizutani and Genske, even if properly motivated, does not teach or suggest a portable wireless communication device that provides a computing device with wireless Internet access, as recited in the claim.

Claim 1 recites a memory circuit that includes a private memory area not accessible or viewable by a user, the private memory area storing protected computer software that is installable and executable at the computing device to enable the radio frequency communication at the computing device. Embodiments of the memory circuit are referenced as ROM, RAM, or flash memory at paragraphs [0034] and [0037] of the application. The Examiner notes that Mizutani and Genske do not teach or suggest these features, but cites Luu as disclosing such a feature, presumably referencing the protected area 26 of the hard disk drive. The Examiner states that the motivation to combine Luu with the other cited art is that Luu would enable installation of a program without user participation and would enable protection of files.

Applicant notes that Luu is directed to storing an installable program on a portion of a hard disk drive that is not accessible by a user's preferred operating system. The hard disk drive is built into and integral with a computer system and

allows distribution of software without use of portable media or online connections. (Luu, col. 1, lines 31-35.) Being explicitly directed to use of a hard disk drive that is integral with a computer, Luu does not teach or suggest portable wireless device not being an integrated part of a computing device comprising memory circuit that includes a private memory area not accessible or viewable by a user. Moreover, being explicitly directed to providing pre-stored distribution of software without use of portable media or online connections, Luu would lead one skilled in the art away from installing software from a portable wireless communication device that is not an integrated part of a computing device and is user-connectable to and user-disconnectable from the external port of the computing device, as recited in the claim. None of the other cited references describes, or is cited as describing the restriction recited in the claims including a memory circuit that includes a private memory area not accessible or viewable by a user, the private memory area storing protected computer software, the protected computer software being installable and executable at the computing device.

Applicants submit, therefore, that the rejection is improper and should be withdrawn because the cited references do not teach or suggest a portable wireless communication device that is not an integrated part of a computing device and includes a memory circuit that includes a private memory area not accessible or viewable by a user.

Moreover, the wireless USB hub function of Mizutani would lead one skilled in the art away from the claimed portable wireless communication device with a memory circuit that includes a private memory area not accessible or viewable by a user, the private memory area storing protected computer software that is installable and executable at the computing device to enable the radio frequency communication at the computing device. In particular, the wireless USB hub of Mizutani functions as part of a conventional USB bus that is a pre-existing, integral part of a host computer for pass data between the host computer and a peripheral device. A USB bus is not an external USB port that is connectable and disconnectable by a user. There is no teaching or suggestion to

modify the device of Mizutani so that it adds to a host computer any software to provide communication functionality that does not already exist on the host computer. In Mizutani, The operation of the host computer, including software running on it, is not modified at all by the operation of connecting or disconnecting the wireless USB hub to the USB bus by a user.

Moreover, there is no teaching or suggestion in the cited references of providing a portion of a conventional USB bus with any sort of memory, much less a private memory area as recited in the claim. As part of a conventional USB bus and with no need to install operating software on the host computer, a person skilled in the art would be lead away from modifying Mizutani to include any memory other than the described data transfer buffer. As a result, applicant submits that the cited references do not teach or suggest modifying Mizutani to include any additional private memory, or that the private memory area storing protected computer software, the protected computer software being installable and executable at the computing device.

Finally, the Examiner cites Hancock as teaching a "wireless transceiver that provides wireless Internet access." However, Hancock is directed to a system in which a server provides to a client over the Internet information based upon the geographic location of the client. The "wireless transceiver" of Hancock is described as an integral aspect of a "portable computing device 1302." Hancock does not describe a portable wireless communication device that is not an integrated part of a computing device and is user-connectable to and user-disconnectable from the computing device.

Accordingly, applicants submit that the cited references do not teach or suggest a portable wireless communication device that is not an integrated part of a computing device and is user-connectable to and user-disconnectable from the external port of computing device to provide the computing device with wireless Internet access, the portable wireless communication device including a private memory area not accessible or viewable by a user. For the foregoing reasons, applicant submits that claim 1 and its dependent claims are patentably

distinct from the cited references. Independent claims 19 and 39, and their respective dependent claims, are likewise patentably distinct. Applicant requests, therefore, that the rejections of the claims be withdrawn.

Furthermore, claims 4, 21, and 42 are rejected under 35 USC 103(a) for obviousness over Mizutani, Genske, Luu, and Hancock in combination with Kusuda (US Publ. No. 2002/0083430). The Examiner cites Kusuda as disclosing the uninstallation of protected computer software from the computing device automatically upon disconnecting "the device interface from the external interface of the computing device."

Claims 4 and 42 have been amended to clarify that the protected computer software is uninstalled from the computing device by software launched from the portable wireless communication device. Claim 21 already recites that "one of the autorun software and protected computer software application is further operable to uninstall at least part of the protected computer software application from the computing device." Accordingly, the portable wireless communication device of claims 4, 21, and 42 is operable to install and uninstall protected software regardless of preexisting operability on the computing device.

In contrast, Kusuda is directed to a hardware control unit or apparatus that is built into a "connected device," such as a TV receiver, to control installation and uninstallation of software. (Kusuda, paragraph 0044.) Kusuda is directed, therefore, to a hardware system that is integrally built into a device to preconfigure the device to receive control software. (Kusuda, paragraphs 004-010.) In contrast, claims 4, 21, and 42 of the present application are directed to software for uninstalling protected computer software automatically upon disconnecting from the computing device a portable wireless communication device that is not an integrated part of the computing device. Neither Kusuda nor any of the other cited references teaches or suggests software for uninstalling protected computer software automatically upon disconnecting a portable wireless communication device from a computing device.

Moreover, Kusuda would lead one skilled in the art away from such software for uninstalling protected computer software by explicitly teaching that a hardware control unit be built into a computing device. In particular, Kusuda teaches that automatic uninstallation of software be a preconfigured hardware feature in a device rather than a software feature that can be provided to virtually any computing device employing the portable wireless communication device that is not integrated part of the computing device. Applicant submits, therefore, that claims 4, 21, and 42 are further patentably distinct from the cited art and should be allowed.

Applicant believes the application is in condition for allowance and respectfully requests the same.

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Respectfully Submitted,

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